

# NAEP 2005 Mathematics Results

June 2006

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### Basic Facts: National

- Tests administered January—April 2005
- Fifty-two jurisdictions participated in NAEP in 2005: the 50 states, the District of Columbia, and the Department of Defense Education Activity Schools.
- More than 172,000 students at grade 4, 162,000 students at grade 8, and 9,000 students at grade 12 were tested nationwide



### Basic Facts: Vermont

- More than 4,000 Vermont students, in grades 4 and 8, participated in the NAEP Math exam
- Vermont has taken part in NAEP Math assessments in grades 4 and 8 since 1996

Since 1964, NAEP, known as the Nation's Report Card, has been the only ongoing nationally representative indicator of what American students know and are able to do in key subject areas.

## National Results

Mathematics performance improved for the nation, for the majority of states, and for many student groups. Fourth-graders' average score was 3 points higher and eighth-graders' average score was 1 point higher in 2005 than in 2003, on a 0 to 500 point scale. The average scores increased since the first assessment year, 1990, by 25 points at grade 4 and by 16 points at grade 8.

Between 1990 and 2005, the percentage of fourth-graders performing at or above *Basic* increased by 30 percentage points, from 50 to 80 percent, and the percentage performing at or above *Proficient* increased from 13 to 36 percent. The percentage of eighth-graders performing at or above *Basic* was 17 percentage points higher in 2005 (69 percent) than in 1990 (52 percent), and the percentage performing at or above *Proficient* increased from 15 to 30 percent. Examining the short-term trends between 2003 and 2005, when all 50 states and the District of Columbia and Department of Defense Schools were assessed, shows average scores for students at grade 4 increased in 31 states and both jurisdictions. The percentage of students performing at or above *Basic* increased in 23 states and the District of Columbia.

### Subgroup Results

#### Grade 4

White fourth-graders scored higher on average in mathematics than their Black and Hispanic peers in 2005. The average scores for all three of these racial/ethnic groups were higher in 2005 than in any previous assessment year. In 2005, students who were eligible for free or reduced-price school lunch and those who were not eligible had higher average scores in 2005 than in 1996. In 2005, male students scored higher on average than female students. Both male and female fourth-graders' average scores were higher in 2005 than in any previous assessment year.

### Subgroup Results

#### Grade 8

The average scores for White, Black, and Hispanic eighth-graders were higher in 2005 than in any previous assessment year. Students who were eligible for free or reduced-price lunch and those who were not eligible scored higher on average in 2005 than in any previous assessment year when information on eligibility was collected, from 1996 through 2003. Average scores for male and female eighth-graders were both higher in 2005 than in 1990 or in 2003.

To read an online Q&A about the national NAEP results, visit <http://nces.ed.gov/whatsnew/statchat/transcripts/ts10192005.asp>.

## More information

NAEP Web Site:

<http://nces.ed.gov/nationsreportcard/>

Vermont Department of Education Web Site:

<http://www.state.vt.us/educ/>

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# Vermont Results

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## Grade 4

**Comparison with national results**-Vermont's average scale score in 2005 was *statistically significantly higher* than the national average scale score of students in public schools across the country (244 vs. 237). Vermont...

- outperformed 39 of the 52 states/jurisdictions that participated in the assessment
- performed at the same level as 11 states/jurisdictions
- performed lower than 1 state/jurisdiction

**Comparison with state performance in past years**-Vermont's average scale score in 2005 was not statistically different than the state's average scale score in 2003 but was *statistically significantly higher* than the average scale score in 1996. The percentage of Vermont students who scored at or above Proficient in 2005 (44%) was not statistically significantly different from that in 2003 but was *statistically significantly higher* than that in 1996.

### Subgroup results

- The average scale score of male students was *statistically significantly higher* than female students in 2005 (5 point differential).
- The average scale score of students eligible for free/reduced price lunch (an indicator of poverty) was *statistically significantly lower* than that of students not eligible for the program (19 point differential).

## Grade 8

**Comparison with national results**-Vermont's average scale score in 2005 was *statistically significantly higher* than the national average scale score of students in public schools across the country (287 vs. 278). Vermont...

- outperformed 43 of the 52 states/jurisdictions that participated in the assessment
- performed at the same level as 7 states/jurisdictions
- performed lower than 1 state/jurisdiction

**Comparison with state performance in past years**-Vermont's average scale score in 2005 was not statistically different than the state's average scale score in 2003 but was *statistically significantly higher* than the average scale score in 1996. The percentage of Vermont students who scored at or above Proficient in 2005 (38%) was not statistically significantly different from that in 2003 but was *statistically significantly higher* than that in 1996.

### Subgroup results

- The average scale score of male students was not statistically significantly different than female students in 2005 or 1996.
- The average scale score of students eligible for free/reduced price lunch (an indicator of poverty) was *statistically significantly lower* than that of students not eligible for the program (21 point differential).

## NAEP in 2007

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NAEP will be testing in three subject areas in Vermont next year: Reading (Grade 4 and 8), Mathematics (Grades 4 and 8) and Writing (Grade 8). The testing window runs from January 22<sup>nd</sup> through March 2<sup>nd</sup>. Principals of schools selected for participation were notified of their specific assessment date(s) in early June. Students will spend about 90 minutes participating, including answering questions in one subject area and completing background questionnaires. Schools will receive more information about the assessments in the coming months. Please contact the Vermont NAEP Coordinator, Susan Hayes, with any questions (802) 828-5892 or [susanhayes@education.state.vt.us](mailto:susanhayes@education.state.vt.us).